

Comparisons of Job Characteristics

Focus Occupation: Industrial Machinery Mechanics (49-9041)

Associated Occupation: Maintenance and Repair Workers, General (49-9042)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 93

Focus Occupation: Industrial Machinery Mechanics (49-9041)

Associated Occupation: Maintenance and Repair Workers, General (49-9042)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mechanical	6.8	19.3	20.1	0	Current knowledge level may be sufficient
Building and Construction	4.0	14.3	9.7	<<	Extensive education and/or training may be required
Public Safety and Security	6.9	12.0	8.3	<<	Extensive education and/or training may be required
Design	5.2	11.7	11.5	0	Current knowledge level may be sufficient
Engineering and Technology	5.7	10.3	13.0	>	Current knowledge level is likely sufficient
Physics	4.3	8.8	7.4	<	Expanded education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 84

Focus Occupation: Industrial Machinery Mechanics (49-9041)

Associated Occupation: Maintenance and Repair Workers, General (49-9042)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Equipment Maintenance	3.5	12.7	14.6	>	Skill level is likely sufficient
Repairing	3.4	12.3	15.6	>>	Skill level is likely more than sufficient
Troubleshooting	4.5	10.0	13.6	>>	Skill level is likely more than sufficient
Quality Control Analysis	5.9	9.8	12.3	>	Skill level is likely sufficient
Equipment Selection	3.3	9.5	9.8	0	Current skill level may be sufficient
Installation	1.7	8.3	6.4	<	A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 79			
Focus Occupation: Industrial Machinery Mechanics (49-9041) Associated Occupation: Maintenance and Repair Workers, General (49-9042)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Information Ordering	9.9	13.3	11.8	<	Some improvement in abilities may be required
Multilimb Coordination	6.0	11.8	11.5	0	Current ability level may be sufficient
Manual Dexterity	6.5	11.4	12.6	>	Current ability level is likely sufficient
Visualization	7.5	11.0	10.7	0	Current ability level may be sufficient
Static Strength	5.0	9.8	10.1	0	Current ability level may be sufficient
Extent Flexibility	4.8	9.2	10.3	>	Current ability level is likely sufficient
Speed of Limb Movement	3.2	5.8	7.7	>>	Current ability level is likely more than sufficient
Gross Body Equilibrium	3.2	5.6	7.3	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 95
Focus Occupation: Industrial Machinery Mechanics (49-9041) Associated Occupation: Maintenance and Repair Workers, General (49-9042)		
Work Activities	Exclusivity of Activity	
Adhere to safety procedures	12	
Adjust or set mechanical controls or components	69	
Align or adjust clearances of mechanical components or parts	72	
Apply cleaning solvents	41	
Assemble and install pipe sections, fittings, or plumbing fixtures	71	
Assemble, dismantle, or reassemble equipment or machinery	70	
Bend tubing or conduit	81	
Conduct tests to locate mechanical system malfunction	71	
Control HVAC equipment	89	
Coordinate production maintenance activities	85	
Cut, bend, or thread pipe for gas, air, hydraulic, or water lines	84	
Determine installation, service, or repair needed	58	
Diagnose mechanical problems in machinery or equipment	65	
Fabricate, assemble, or disassemble manufactured products by hand	11	
Identify properties of metals for repair or fabrication activities	71	

Inspect machinery or equipment to determine adjustments or repairs needed	42
Install electrical fixtures or components	71
Install electronic equipment, components, or systems	62
Install equipment or attachments on machinery or related structures	48
Install industrial machinery or related heavy equipment	89
Install or replace meters, regulators, or related measuring or control devices	66
Install/connect electrical equipment to power circuit	57
Lubricate machinery, equipment, or parts	59
Maintain or repair industrial or related equipment/machinery	39
Maintain or repair work tools or equipment	81
Maintain repair records	65
Maintain specialized manufacturing or commercial equipment or machinery	99
Maintain welding machines or equipment	70
Move or fit heavy objects	8
Observe or listen to machinery or equipment operation to detect malfunctions	81
Operate crane in construction, manufacturing or repair setting	76
Operate hoist, winch, or hydraulic boom	34
Order or purchase supplies, materials, or equipment	35
Perform safety inspections in industrial, manufacturing or repair setting	32
Position, align, or level machines, equipment, or structures	74
Read blueprints	10
Read schematics	34
Read specifications	23
Read technical drawings	7
Read work order, instructions, formulas, or processing charts	9
Repair or adjust measuring or control devices	71
Repair or replace electrical wiring, circuits, fixtures, or equipment	49
Repair or replace malfunctioning or worn mechanical components	62
Replace electronic components	63
Requisition stock, materials, supplies or equipment	54
Set up and operate variety of machine tools	62
Solder electrical or electronic connections or components	55
Test electrical/electronic wiring, equipment, systems or fixtures	54
Test mechanical products or equipment	56
Understand service or repair manuals	40
Understand technical operating, service or repair manuals	6
Use acetylene welding/cutting torch	54
Use arc welding equipment	62
Use basic plumbing techniques	72
Use combination welding procedures	68
Use control or regulating devices to adjust or maintain industrial machinery	89
Use electrical or electronic test devices or equipment	40
Use hand or power tools	2
Use high voltage apparatus	76
Use knowledge of metric system	39
Use knowledge of welding filler rod types	75
Use machine tools in installation, maintenance, or repair	72
Use pipe fitting equipment	80

Use precision measuring devices in mechanical repair work	61
Use pressure gauges	76
Use soldering equipment	44
Use tube bending equipment	95
Verify levelness or verticality, using level or plumb bob	72
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 83

Focus Occupation: Industrial Machinery Mechanics (49-9041)

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Tools and Technologies	Exclusivity
Business function specific software	1
Cleaning equipment	11
Compressors	9
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Cutting tools	18
Dispensing tools	6
Electrical measuring and testing equipment	7
Forming tools	2
Garden tools	12
Holding and clamping tools	3
Indicating and recording instruments	2
Industrial trucks	10
Industry specific software	1
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Machinery for working wood and stone and ceramic and the like	12
Measuring and layout tools	3
Mechanical instruments	14
Metal bending and forming machinery	17
Pneumatic tools	8
Power tools	2
Prying and bending tools	10
Pumps	9
Rough and finishing tools	5
Sealing tools	21
Soldering and brazing and welding machinery and supplies	6

Tool attachments and accessories	12
Viewing and observing instruments and accessories	4
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.